

In the claims:

Cancel claims 39, 42 and 43.

Amend the following claims.

--1. (Once Amended) A composition, comprising:

a matrix functionality capable of providing an adhesive bond to an electrically conductive surface and an electrolyte functionality providing sufficient ionic conductivity to said composition so that, when said matrix functionality forms said adhesive bond to said electrically conductive surface, said composition can support a faradic reaction at said electrically conductive surface, said faradic reaction weakening said adhesive bond.

23. (Once Amended) The composition of claim 1 or 9, wherein said composition has an ionic conductivity in the range of 10^{-11} S/cm to 10^{-5} S/cm.

24. (Once Amended) The composition of claim 1 or 9, wherein said composition has an ionic conductivity in the range of 10^{-9} S/cm to 10^{-7} S/cm.

30. (Once Amended) A composition, comprising:

a curable polymeric material; and

an electrolyte located in said curable polymeric material;

wherein said curable polymeric material, when cured, can form adhesive bonds with an electrically surface, said adhesive bonds having a shear strength of greater than 200 psi, and said composition has sufficient ionic conductivity to support a faradic reaction at said electrically conductive surface, said faradic reaction weakening said adhesive bonds.

31. (Once Amended) The composition of claim 30, wherein said curable polymeric material is selected from the group consisting of epoxy resins, phenolic resins, acrylic resins, melamine resins, maleimide resins and urethanes.

34. (Once Amended) A bonded structure, comprising:
a first material layer having an electrically conductive surface;
a second material layer having an electrically conductive surface; and
a composition disposed between the electrically conductive surface of the first material layer and the electrically conductive surface of the second material layer, the composition, comprising:

a matrix functionality; and
an electrolyte functionality,

wherein:

the matrix functionality forms an adhesive bond to the electrically conductive surface of the first material layer, and

the electrolyte functionality provides sufficient ionic conductivity to the composition so that the composition can support a faradic reaction at the electrically conductive surface of the first material layer, the faradic reaction weakening said adhesive bond.

40. (Once Amended) The bonded structure of claim 34, wherein at least one of said first and second material layers is an electrically conductive coating applied to a substrate.

41. (Once Amended) The bonded structure of claim 36, wherein at least one of said first and second material layers is an electrically conductive coating applied to a substrate.--

Add the following new claims.

--60. (New) The composition of claim 1, wherein, when said matrix functionality forms said adhesive bond to said electrically conductive surface, said adhesive bond has a shear strength of greater than 200 psi.

61. (New) The bonded structure of claim 34, wherein an adhesive bond has a shear strength of greater than 200 psi.

62. (New) The bonded structure of claim 34, further comprising an electrically conductive element between the first and second material layers.

63. (New) The bonded structure of claim 34, wherein the first material layer comprises an electrically conductive element selected from the group consisting of foils, sheets, meshes and grids.

64. (New) The bonded structure of claim 63, wherein the second material layer comprises an electrically conductive element selected from the group consisting of foils, sheets, meshes and grids.

65. (New) The bonded structure of claim 34, wherein the second material layer comprises an electrically conductive element selected from the group consisting of foils, sheets, meshes and grids.--